PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW HALF SIGNAL AT THE INTERSECTION OF MD 2/4 AT COSTER/MILL BRIDGE ROAD IN CALVERT COUNTY. MD 2/4 IS ASSUMED TO RUN IN A NORTH/SOUTH DIRECTION.

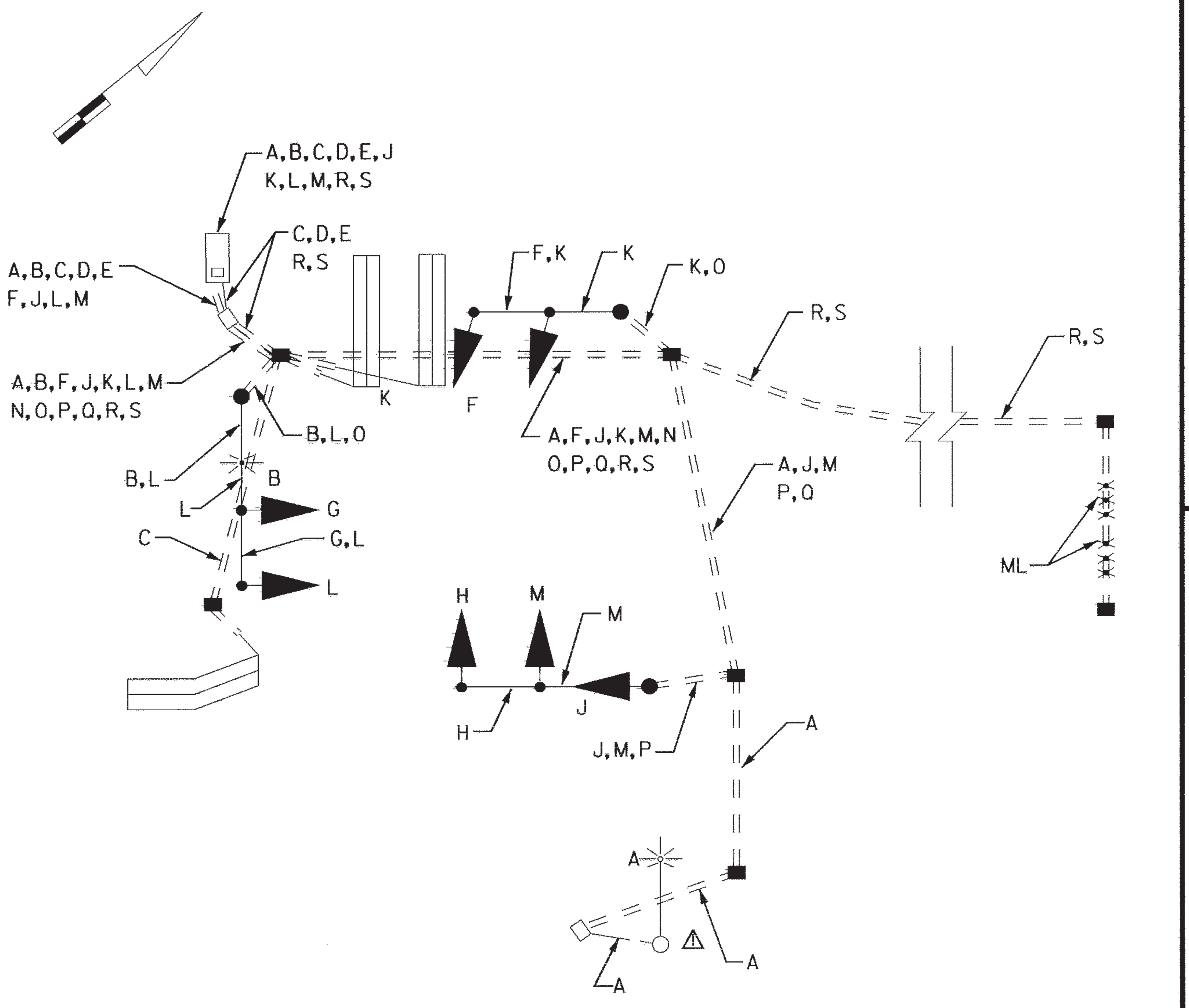
INTERSECTION OPERATION

NORMAL OPERATION
THE INTERSECTION WILL OPERATE IN A NEMA-THREE-PHASE FULLY ACTUATED MODE. THE MOVEMENTS ON MD 2/4 WILL OPERATE CONCURRENTLY. THE MOVEMENTS ON COSTER/MILL BRIDGE ROAD WILL OPERATE CONCURRENTLY.

SPECIAL NOTE

ALL UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE UTILITIES MAY BE MODIFIED PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY.

WIRING DIAGRAM



A,B	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)	N,O P,Q	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
C,D,E	ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED NO. 14 AWG)	R,S	MICRO-LOOP 1000 FT. LEAD IN
F,G,H	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)	ML	MICRO-LOOP NON INVASIVE PROBE SET
J,K L,M	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)		

EQUIPMENT LIST "A"

⚠ A. EQUIPMENT TO BE FURNISHED BY THE SHA

CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
973023	813	93 S.F.	SHEET ALUMINUM SIGN TO CONSIST OF: -1 EA. R3-5L (LEFT ONLY) 30 IN. X 36 IN. - MAST ARM MOUNT -1 EA. R3-5R (RIGHT ONLY) 30 IN. X 36 IN. - MAST ARM MOUNT -1 EA. D3-2 (STREET NAME SIGN) 32 IN. X 48 IN. - MAST ARM MOUNT -1 EA. W4-1L (MERGE FROM LEFT) 30 IN. X 30 IN. - GROUND MOUNT -1 EA. OM-1 (OBJECT MARKER) 18 IN. X 18 IN. GROUND MOUNT -1 EA. R3-3(2) (NO LEFT OR U TURN SYMBOL) 30 IN. X 30 IN. - GROUND MOUNT -2 EA. R4-7 (KEEP RIGHT SYMBOL) 24 IN. X 30 IN. - GROUND MOUNT -1 EA. R1-2 (YIELD) 36 IN. X 36 IN. - GROUND MOUNT -1 EA. R5-1 (DO NOT ENTER) 30 IN. X 30 IN. - GROUND MOUNT - ASSOCIATED SHIELD ASSEMBLY R4-8A (KEEP LEFT) 24 IN. X 30 IN., OM-1 (OBJECT MARKER) 18 IN. X 18 IN. - GROUND MOUNT - ASSOCIATED SHILED ASSEMBLY M3-1A (NORTH NON INTER) 24 IN. X 12 IN., M1-5 (MD RTE SHLD) 30 IN. X 24 IN., M6-1 (DIRECT ARROW NON INTER) 21 IN. X 15 IN. - POLE MOUNT

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #5 ARE AS FOLLOWS:

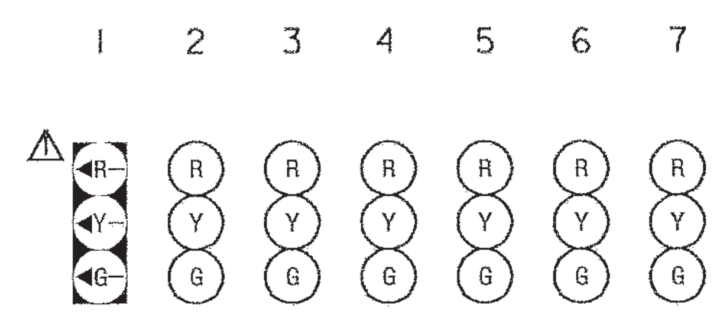
MARK COBLENTZ
ASSISTANT DISTRICT ENGINEER-CONSTRUCTION
PHONE: 410-841-1004

CHARLES GEORGE
ASSISTANT DISTRICT ENGINEER-MAINTENANCE
PHONE: 410-841-1002

LARRY ELLIOT
ASSISTANT DISTRICT ENGINEER-TRAFFIC
PHONE: 410-841-1003

JOHN MAYS
UTILITIES ENGINEER
PHONE: 410-841-1005

PHASE CHART



PHASE 1	◄G–	G	G	R	R	R	R	
1 CHANGE	◄Y–	Y	Y	R	R	R	R	
PHASE 2	◄R–	R	R	G	G	R	R	
2 CHANGE	◄R–	R	R	Y	Y	R	R	
PHASE 4	◄R–	R	R	R	R	G	G	
4 CHANGE	◄R–	R	R	R	R	Y	Y	
FLASHING OPERATION	FL / ◄R	FL / R	FL / R	FL / Y	FL / Y	FL / R	FL / R	

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
203030	205	2 C.Y.	TEST PIT EXCAVATION
⚠ 585462	555	28 L.F.	REMOVAL OF EXISTING PAVEMENT MARKING - ANY WIDTH
585624	556	150 L.F.	24 IN. HEAT APPLIED THERMOPLASTIC WHITE PAVEMENT MARKING
801004	801	⚠ 12 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
802501	805	⚠ 440 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805115	805	49 L.F.	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-BORED
805135	805	⚠ 82 L.F.	3 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED
805140	805	⚠ 610 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED
805155	805	⚠ 296 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-SLOTTED
805160	805	40 L.F.	1 IN. LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT
810605	810	2 EA.	MICRO-LOOP NON INVASIVE PROBE SET WITH 1000 FT. LEAD IN
811001	811	⚠ 10 EA.	ELECTRICAL HANDHOLE
⚠ 813014	813	47 S.F.	INSTALL GROUND MOUNTED SIGN
⚠ 813015	813	46 S.F.	INSTALL OVERHEAD SIGN
818030	818	1 EA.	27 FT. STEEL POLE WITH 38 FT. MAST AEM
818036	818	⚠ 2 EA.	27 FT. STEEL POLE WITH 50 FT. MAST ARM
831010	806	⚠ 1 EA.	250 WATT HPS LUMINAIRE WITH PHOTOCELL
837001	804	⚠ 3 EA.	GROUND ROD ¾ IN. X 10 FT. LENGTH
860272	814	⚠ 18 EA.	12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
⚠ 860274	814	3 EA.	12 IN. OPTICALLY PROGRAMMED SIGNAL HEAD SECTION
861104	810	190 L.F.	ELECTRICAL CABLE 2-CONDUCTOR (ALUMINUM SHIELDED NO. 14 AWG)
861107	810	110 L.F.	ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)
861108	810	1040 L.F.	ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 AWG)
861116	810	110 L.F.	ELECTRICAL CABLE 2-CONDUCTOR (NO. 12 AWG)
862101	805	⚠ 1370 L.F.	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
862102	805	367 L.F.	SAW CUT FOR LOOP WIRE
866104	818	⚠ 1 EA.	20 FT. LIGHTING ARM ON SIGNAL STRUCTURE
⚠ 800000	810	1 EA.	REROUTE EXISTING CABLE
800000	XXX	1 LS.	REMOVE AND DISPOSE OF EXISTING SIGNAL MATERIAL

EQUIPMENT LIST "C"

⚠ ALL REMOVED SIGNAL EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

⚠ ADDENDUM NO. 1 04/ /02

THE WILSON T. BALLARD CO.
CONSULTING ENGINEERS
OWINGS MILLS, MARYLAND

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET
MD 2/4 (SOLOMONS ISLAND ROAD)
MD 2/4 AT COSTER/MILL BRIDGE ROAD

DRAWN BY:	MB	F.A.P. NO.	SEE TITLE SHEET	TS NO.	SHEET NO.
CHECKED BY:	PDU	S.H.A. NO.	CA4045176		
SCALE:	NONE	COUNTY:	CALVERT	T.I.M.S. NO.	
DATE:	APRIL 2002	LOG MILE:	⚠0040002004.15	E 919	19 OF 19